



EPARTMENT OF COMMERCE UNITED STATES Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

08/635,130 APPLICATION NUMBER FILING DATE FIRST NAMED APPLICANT P1001 CARAS 04/19/96 08/635,130

EXAMINER DUFFY, P ART UNIT PAPER NUMBER

TIMOTHY E TORCHIA 460 POINT SAN BRUNO BOULEVARD SOUTH SAN FRANCISCO CA 94080 1818 04/08/97 DATE MAILED: This is a communication from the examiner in charge of your application. COMMISSIONER OF PATENTS AND TRADEMARKS OFFICE ACTION SUMMARY Responsive to communication(s) filed on ☐ This action is FINAL. ❖ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 D.C. 11; 453 O.G. 213. A shortened statutory period for response to this action is set to expire the expire menth(s), as thirty days, which is lenger, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35-U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). **Disposition of Claims** Claim(s)_ _ is/are pending in the application. _ is/are withdrawn from consideration. The 37 AT light tenth methods or her at ☐ Claim(s) is/are allowed. Been by a secolar appearate and the Claim(s) _ is/are rejected. Claim(s) _ __ is/are objected to. ☑ Claims _ are subject to restriction or election requirement. **Application Papers** ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. is/are objected to by the Examiner. ☐ The drawing(s) filed on ___ ☐ The proposed drawing correction, filed on _ is approved disapproved. ☐ The specification is objected to by the Examiner. ☐ The oath or declaration is objected to by the Examiner. 100 Priority under 35 U.S.C. § 119 Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received. received in Application No. (Series Code/Serial Number) received in this national stage application from the International Bureau (PCT Rule 17.2(a)). *Certified copies not received: Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) ☐ Notice of Reference Cited, PTO-892 ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _ ☐ Interview Summary, PTO-413

- SEE OFFICE ACTION ON THE FOLLOWING PAGES -

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

Serial Number: 08/635,130 Page 2

Art Unit: 1818

DETAILED ACTION

Election/Restriction

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 1-17, drawn to DNA, vectors and transformed hosts, classified in class 536, subclass 23.1.
 - II. Claims 18-28, drawn to polypeptides, classified in class 530, subclass 350.
 - III. Claims 29-30, drawn to antibodies, classified in class 530, subclass 387.1.
 - IV. Claim 31, drawn to a method of activating a tyrosine kinase, classified in class 435, subclass 7.21.
 - V. Claims 32-34, drawn to methods of treating neurologic disease using the polypeptide, classified in class 514, subclass 12.
 - VI. Claim 35, drawn to a method of accelerating neovascularization using the polypeptide, classified in class 514, subclass 12.
 - VII. Claims 36-37, drawn to methods of modulating angiogenesis using antagonists of the polypeptide, classified in class 514, subclass 2.
 - VIII. Claims 38-39, drawn to methods of diagnosis of neurologic disease by detecting DNA, classified in class 435, subclass 6.
- 2. The inventions are distinct, each from the other because of the following reasons:
- 3. The inventions of Groups I, II and III are related as products. Group I is drawn to DNA, Group II is drawn to polypeptides and Group III is drawn to antibodies. These biological products are separate and distinct each from the other because they have different chemical structures (i.e. protein versus DNA), perform different biological functions (i.e. encode proteins versus signal transducing proteins), have different specific binding characteristics (i.e.

.

Page 3

Serial Number: 08/635,130

Art Unit: 1818

polypeptides bind the receptor and antibodies bind the polypeptide) and are produced by different methods. In addition, the search required for Group I is not required for either Group II or Group III.

- The inventions of Groups IV, V, VI, VII and VIII are related as methods. The method of 4. Group IV is drawn to a method of activating a tyrosine kinase receptor with the polypeptide, the method of Group V is drawn to methods of treating neurologic disease using the polypeptide, the method of Group VI is drawn to accelerating neovascularization by administering the polypeptide, the method of Group VII is drawn to methods of modulating angiogenesis using antagonists of the polypeptide and the method of Group VIII is drawn to diagnosis of neurologic disease by detecting DNA. The inventions of Groups VI and VIII are separate and distinct from each other and any one of Groups IV, V or VI because these groups have different method steps, use different reagents (antagonists or DNA or polypeptides) and have different final outcomes (modulating angiogenesis, diagnosing disease or treating disease). The inventions of Group IV, V and VI are separate and distinct each from the other because they have different goals as evidenced by the distinct preambles, different method steps, and different final outcomes (i.e. activation of a tyrosine kinase, treatment of neurologic disease and accelerating neovascularization). The search for activation of a receptor tyrosine kinase, would not be required for treatment of neurologic disease or acceleration of neovascularization. For the foregoing reasons, the methods of Groups IV, V and VI are deemed separate and distinct.
- Inventions II and IV, V or VI are related as product and processes of use. The inventions 5. can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP

Page 4

Serial Number: 08/635,130

Art Unit: 1818

§ 806.05(h)). In the instant case the polypeptide can be used in a materially different process of using that product, such as an immunogen in the process of making antibodies.

- Inventions I and VIII are related as product and process of use. The inventions can be 6. shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the DNA of Group I can be used to produce the protein by recombinant methods or used to transform cellular hosts and thus the product can be used in materially different methods.
- Because these inventions are distinct for the reasons given above and have acquired a 7. separate status in the art because of their recognized divergent subject matter, as shown by their different classification, restriction for examination purposes as indicated is proper. For the foregoing reasons the methods are deemed separate and distinct and in the absence of restriction would place an undue search burden on the examiner.
- A telephone call was made to Timothy Torchia on April 1, 1997 to request an oral 8. election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the 9. inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any

Serial Number: 08/635,130

Art Unit: 1818

amendment of inventorship must be accompanied by a diligently-filed petition under 37

CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia A. Duffy, Ph.D. whose telephone number is (703) 305-7555. The examiner can normally be reached on Monday-Friday from 6:30 AM to 3:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Hutzell, can be reached at (703) 308-4310.

Any inquiry of a general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Papers relating to this application should be directed may be submitted to Group 1800 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The FAX number for Art Unit 1818 is (703) 308-4242.

Patricia A. Duffy, Ph.D. April 4, 1997

Patricia A. Duffy, Ph.D. Patent Examiner Group 1800